

REMARKS

Status of the Claims

- Claims 1-8 are pending in the Application after entry of this amendment.
- Claims 1-8 are rejected by Examiner.
- Claims 1-3 and 5 are amended by Applicant.

Claim Objections

Claims 1-3 are objected to for lack of antecedent basis of terms in each of Claims 1-3. Applicant has amended Claims 1-3 to provide proper antecedent basis.

Claim Rejections Pursuant to 35 U.S.C. §102

Claims 1-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by B. Carpenter, et al. Connection of IPv6 Domains via IPv4 Clouds (Network Working Group), hereafter referred to as "Carpenter". Applicant respectfully traverses the rejection.

Independent Claim 1 is amended to include the clarifying aspect that an outbound IPv6 packet is encapsulated into an IPv4 packet, the IPv4 packet comprising a IPv4 header with a private IPv4 source address, the outbound IPv6 packet comprising a IPv6 header with a 6to4 source address, the IPv6 header comprising an Interface ID value. Claim 1 retains the aspect of storing an association of the private IPv4 source address and the Interface ID value of the 6to4 source address for opposite address translation of inbound packets.

Carpenter discusses connections with IPv6 sites using an IPv4 network. Carpenter discusses a method for supporting a 6to4 tunneling protocol across a network address translation mechanism comprising the steps of receiving from a first network an outbound IPv6 packet encapsulated into an IPv4 packet,

the IPv4 packet comprising a IPv4 header with a private IPv4 source address, the outbound IPv6 packet comprising a IPv6 header with a 6to4 source address, the IPv6 header comprising an Interface ID value, translating the private IPv4 source address in the IPv4 header into a public IPv4 source address, and transmitting the translated packet over the IPv4 network.

However, Carpenter does not discuss the Claim 1 step of storing an association of the private IPv4 address and the Interface ID value for opposite address translation of inbound packets. The Interface ID is discussed in Carpenter Section 2. this is similar to the prior art Figure 2 of the present application.

The present Office Action on page 4 indicates that the claimed step of storing an association of the private IPv4 address and the Interface ID is presented in carpenter Section 5.1 and 5.3. Applicant respectfully disagrees.

Carpenter Section 5.1 deals with the 6to4 deployment scenario. Section 5.1, page 8, indicates that:

“When an IPv6 host on site B queries the DNS entry for a host on site A, or otherwise obtains its address, it obtains an address with the {FP=001,TLA=0x0002,NLA=192.1.2.3}/48 and whatever SLA and Interface ID applies.”

Carpenter Section 5.1, page 9, also indicates that:

“When an outgoing packet reaches the 6to4 router, it is encapsulated as defined in Section 3, according to the additional sending rule defined in Section 5.3. Incoming packets are decapsulated according to the additional decapsulation rule defined in Section 5.3.”

Carpenter, Section 5.3, pages 13-14, specifies the additional sending and decapsulation rules which includes the sending rule of applying any security checks and encapsulating the packet in IPv4 as in Section 3, and the decapsulation rule of applying any security checks and removing the IPv4 header and submitting the packet to local IPv6 routing.

Carpenter, at sections 5.1 and 5.3 fails to disclose the Claim 1 aspect of storing an association of the private IPv4 source address and the Interface ID value of the 6to4 source address for opposite address translation of inbound packets.

The technical effect of storing an association of the private IPv4 address and the Interface ID value for opposite address translation of inbound packets is to enable an opposite translation, and to support a bi-directional communication, in particular in the context of X/Y NAT as indicated in page 1 of the specification description.

This aspect is not disclosed in Carpenter.

For the same reasons as expressed above, Carpenter fails to discuss the Claim 7 aspect of an application for storing the private IPv4 addresses included in the 6to4 source address of a host of the IPv6 network, for outbound packets; and for updating the 6to4 destination address of an inbound packet with a stored private IPv4 address having same Interface ID as the 6to4 destination address.

Applicant respectfully submits that Carpenter fails to anticipate pending independent Claims 1 and 7 under 35 USC §102(b) per MPEP §2131 because Carpenter fails to disclose all of the elements of independent Claims 1 and 7 as discussed above.

Specifically, Carpenter fails to teach the aspects of storing an association of the private IPv4 source address and the Interface ID value of the 6to4 source address for opposite address translation of inbound packets as recited in pending independent Claim 1. Carpenter also fails to disclose the aspect of an application for storing the private IPv4 addresses included in the 6to4 source address of a host of the IPv6 network, for outbound packets; and for updating the 6to4 destination address of an inbound packet with a stored private IPv4 address having same Interface ID as the 6to4 destination address as recited in pending Claim 7.

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Since Carpenter fails to recite all elements of pending independent Claims 1 and 7, then Carpenter cannot anticipate independent Claim 1 and its dependent Claims 2-6 as well as independent Claim 7 and its dependent Claim 8 under 35 U.S.C. §102(b). Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. §102(b) rejection of pending Claims 1-8 in light of the amendments and discussion above.

Conclusion

Applicant respectfully submits that the pending claims patentably define over the cited art and respectfully requests reconsideration and withdrawal of the 35 U.S.C. §102 rejections of the pending claims. Reconsideration for a Notice of Allowance is respectfully requested.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 07-0832 therefore.

Respectfully submitted,

Dirk Van Aken, et al.

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/Jerome G. Schaefer/
Jerome G. Schaefer
Attorney for Applicants
Reg. No. 50,800
(609) 734-6451

Thomson Licensing, LLC
Patent Operation
PO Box 5312
Princeton, NJ 08543-5312